

C51.11:EN 2/2

Federal

Energy

Technology



available from

NTIS

National Technical Information Service
U.S. Department of Commerce

Contents

Department of Energy Data Base	2
DOE Periodicals	3
CIA Energy Reports	5
DOE Operations/Research Data	6
NASA Energy Bibliography	6
NRC Docket Materials	7
Examples of Energy Technical	
Reports in the NTIS Collection	9-18
NTIS Products and Services	
Relating to Energy	19-21
NTIS Title Index	22
NTIS Price Codes	23
How to Order	24
About NTIS	26, 31
Order Forms	28, 29
NTIS Telephone Numbers	32

24,000 energy reports acquired annually and announced by NTIS

Thirty-four percent of the information added to the NTIS Bibliographic Data Base each year is energy related—some 24,000 documents, of which 4000 are of foreign origin.

This catalog is a guide to the location and ordering of the particular energy information you require. Energy topics covered include solar, nuclear, wind, geothermal, solid wastes and fossil.

The information products and services herein are logically organized and easily accessible. You may arrange for a standing order microfiche distribution that will speed energy reports to you according to your specifications as soon as they are received at NTIS; you may prefer the weekly Energy Abstract Newsletter, or some of the several hundred Energy Published Searches.

When you have selected the reports, subscriptions, and standing order services that suit you best you may order directly, using the order form on page 33. Or, you may consult with an NTIS specialist by telephoning (703) 487-4642. Descriptions of other NTIS products and services may be requested using the order form for free material on page 28.

Science Information Exchange Data Base; 200,000 projects

The SIE Data Base consists of summaries of Federally-funded research in progress. The Data Base is very dynamic in that old records are retired and new records are added as projects are completed and new projects begun. There are approximately 100,000 new projects announced annually with more than 200,000 projects existing in the Data Base at any one time.

The SIE Data Base of information about ongoing Federal research projects is available on lease from NTIS. It is expected that management of SSIE and NTIS will be centralized so as to provide more comprehensive information from a single source at the lowest possible cost.

This specialized catalog is one of several designed for NTIS customers having similar interests. Other specialized catalogs are listed on page 28.

600,000-item Energy Data Base from DOE

The world's largest and most comprehensive bibliographic data base on energy is created and maintained by the Department of Energy's Technical Information Center, Oak Ridge, Tennessee and is available for lease through NTIS. The *Energy Data Base* (EDB) includes more than 600,000 items.

This is primarily a bibliographic data file relating to research, development, and demonstration projects on all aspects of energy. *EDB* started in the information programs of the Atomic Energy Commission and the Energy Research and Development Administration (ERDA), all since absorbed into DOE. The information is stored in digital form and includes citations, abstracts, and indexes for use by DOE and the general public in the United States.

Citations consist of all the data elements that describe and uniquely identify a particular information item, such as title, author's name, issuing source, type of literature, language of the item, name of the journal (when articles are selected from journals), and page count. For report items, identifying numbers, sources of availability, and prices are also given. Abstracts are included in the data base so that users can determine whether they wish to obtain a complete text.

EDB items are indexed by subject within the following categories:

Solar energy (also includes tidal and wind power)	Advanced automotive systems
Geothermal energy	Electric power engineering (includes MHD, cryogenics, & superconducting transmission)
Fossil and synthetic fuels	Environmental sciences
Coal	Biomedical sciences, health, and safety
Petroleum and natural gas	Physical research
Oil shales and tar sands	Chemistry
Hydrogen	Physics
Other synthetic and natural fuels	Materials
Fusion energy	Geosciences
Nuclear energy	Engineering
Nuclear fuels	Particle accelerators
Nuclear power plants	Instrumentation
Nuclear reactor technology	Explosions
Energy conservation, consumption, and utilization	Isotope and radiation source technology
Energy policy and management	General and miscellaneous
Energy storage	
Energy conversion	

For more information on leasing the *EDB*, please telephone (703) 487-4808.

All of NTIS' products and services are summarized in General Catalog No. 7 (see page 28).

DOE periodicals cover all energy sources

The monthly *Fusion Energy Update* abstracts and indexes current scientific and technical reports, journal articles, conference papers and proceedings, books, patents, theses, and monographs for all sources of fusion energy.

Subjects covered include plasma physics, physics and engineering of blankets, magnetic fields and coils, power supplies and circuitry, cooling systems, fuel systems, radiation hazards, power conversion systems, inertial confinement systems, and component development and testing. Corporate author, personal author, subject, contract number and report number indexes are included in each issue and cumulated annually.

Price: \$45 annually. Order PB81-915300.

The monthly *Solar Energy Update* announces research, development, and demonstration information from all sources. It abstracts and indexes reports, journal articles, conference proceedings, patents, theses, and monographs. Corporate and personal author, subject, and report number indexes are included and are cumulated annually. All of the information in *Solar Energy Update* (and in the *Fossil and Geothermal Updates*) is included in the energy information data base of the Department of Energy's Technical Information Center.

Price: \$45 annually. Order PB80-914500.

The monthly *Fossil Energy Update* abstracts and indexes current scientific and technical reports, journal articles, conference papers and proceedings, books, patents, theses, and monographs from all sources on fossil energy. Subjects include coal, petroleum, natural gas, oil shale, hydrogen production, hydrocarbon and alcohol fuels, electric power engineering, and magnetohydrodynamic generators. Corporate and personal author and subject and report number indexes are included and are cumulated annually.

Price: \$45 annually. Order PB80-914600.

The monthly *Geothermal Energy Update* contains references to reports, journal articles, conference proceedings, patents, theses, and monographs. Citations and abstracts are grouped under subject categories. Each issue contains corporate and personal author and subject and report number indexes, which are cumulated annually.

Price: \$45 annually. Order PB80-914700.

The monthly *Energy Conservation Update* provides abstracts and an index to the latest studies of energy conservation worldwide. Covers a broad spectrum from transportation and industrial energy savings to the latest research dealing with techniques for residential and commercial heating, lighting, and hot water conservation.

Price: \$45 annually. Order PB80-914800.

Energy research available in paper copy on standing order

Energy SOS (Standing Order Service) automatically brings you the full text of every printed energy report published by NTIS—as many as 11,000 reports annually.

If your needs are specific you can limit the reports you receive to any one or combination of the following subjects.

Approximate No.	Subject
183	Reserves
480	Energy use, supply, and demand
200	Electric power transmission
980	Fuel conversion processes
970	Policies, regulations, and studies
1080	Electric power production
930	Heating and cooling systems
880	Fuels
200	Engine studies (Energy related)
170	Batteries and components
2300	Solar energy
700	Miscellaneous energy conversion and storage
550	Geothermal energy
240	Selected studies in nuclear technology
800	Environmental studies

You will receive your energy reports weeks before you would if ordering them separately. No ordering is required after your first request. Each time a report is issued in your area of interest it will be directed to you automatically. The reports will be charged to the NTIS deposit account which will be opened for you. All transactions will be itemized on your monthly statement.

Energy SOS subscribers pay 20 percent less for reports than buyers of single titles—a savings of about \$1.30 on each report—so that a subscriber to the entire output could save \$14,000 or more in one year.

Why don't you join Aero Propulsion Laboratory, Instituto Mexicano del Petroleo, Shell Oil, Ashland Chemical, Texas Gulf, Fuel Research Institute of South America and others as a subscriber to Energy SOS?

About the dates of NTIS reports

Sometimes NTIS technical reports bear dates seemingly not current. That is because the originating agencies occasionally delay the public availability pending their testing and development of the technology. Regardless of the dates of the reports, their first public availability is usually only weeks before their receipt by NTIS.

CIA information covers world economy, politics, production statistics

Central Intelligence Agency (CIA) publications cover a variety of unclassified foreign information. The subject areas are political, statistical and economic with reports on agriculture, metals, minerals, natural gas, oil, and military and official structures.

CIA reports and analyses are sold singly and by subscription; irregularly issued recurring reports are sold on a standing order basis.

International Energy Statistical Review: Presents economic and statistical information on international oil production, oil consumption, oil imports and exports, crude oil production, natural gas production, storage, imports and exports. It also deals in the area of oil and natural gas trade; oil stocks; oil spot market price; retail petroleum product prices and crude oil prices. Published monthly. The *Review* averages about 30 pages per issue. Prepared by the Central Intelligence Agency.

Price: \$36 annually.

Order: PB81-928600

International Economic and Energy Statistical Review: This publication provides up-to-date information on changes in the domestic and external economic activities of the major non-Communist developed countries. To the extent possible, this report is updated from press ticker and embassy reporting, so that the results are made available to the reader weeks—or even months—before receipt of official statistical publications. U.S. data are provided by U.S. Government agencies. Published every two weeks (26 issues per year). About 25 pages an issue.

Price: \$60 annually.

Order: PB81-928500

The following additional titles are available singly. Inquire as to their frequency of issue and the prices for individual copies:

Energy supplies in Eastern Europe: A Statistical Compilation (NTISUB/E/280-015)

The World Oil Market in the Years Ahead (NTISUB/E/280-010)

Chinese Coal Industry: Prospects Over the Next Decade (NTISUB/E/282-002)

Standing orders for these categories ensure the speediest possible automatic mailing to customers as soon as the documents are received at NTIS. Orders may be entered for paper copies only. Inquire to CIA Product Manager for an estimated price based on the number of documents anticipated in the categories.

DOE operations and research data also on standing order

These are the Department of Energy's unclassified technical reports, critical reviews, conference papers, and symposia results. These reports are described in NTIS abstract newsletters and journals (GRA&I). Complete texts are sold in paper copy and microfiche in 56 categories.

Issued irregularly. Annual standing order for any category, or all categories, requires a minimum of \$100 in an NTIS Deposit Account; \$5 per title is debited from the account as reports are released. Approximately 1,300 reports annually.

NASA energy bibliography quarterly with indexes

Coverage includes regional, national, and international energy systems; research and development on fuels and other sources of energy; energy conversion, transport, transmission, distribution, and storage with special emphasis on the use of hydrogen and of solar energy.

The NASA energy quarterly has five indexes which are cumulative through the year. They include subject, personal author, corporate source, contract number, and report number.

An annual subscription is \$50. Order PB81-902600.

Watch for Price Codes

Most prices in this catalog are indicated by Price Codes. For example: When you read *Gasohol: A Technical Memorandum*. NTIS Price: PCA**A04**/M-F**A01**, you learn from the Price Code table on page 23 that **A04** is the equivalent of \$7, and the **A01** is the equivalent of \$3.50. PC, of course, means paper copy, and MF means microfiche. Price Code Tables may change. Current tables always are free on request from NTIS.

NRC Docket Materials detail nuclear reactor operations, licensing

Nuclear Regulatory Commission (NRC) *Docket Materials* are issuances of information concerning the licensing and operation of nuclear reactors. They range in size from one page to several volumes of pages, but 95 percent are less than 96 pages and contained on one microfiche.

The aperture cards (item B in each of the packages except No. 2, Part III) are enlarged images (35 mm) of the engineering drawings in the docket. Not every docket contains drawings. It is not mandatory for customers to order the aperture cards. Customers may order only microfiche or any of the three packages. Part I is a standing order and is shipped monthly. Part II and Part III are complete in one package.

The monthly publication, *Title List of Documents Made Publicly Available (NRC 0540)*, is included free with orders for Part I. It is an index to the monthly issues. A special title list (NUREG 0568, Rev. 1) is free with orders for No. 1, Part III, and a special title list (NUREG) 0568, Rev. 1, Supp.1) is free with orders for No. 2, Part III. The current docket material (Part I) is available on standing order only. Shipments of Part I material are made monthly. All the microfiche are 24X.

The basic NTIS price for each microfiche sheet compares closely with the former Department of Energy program price, though the volume of documentation has been substantially increased. Aperture cards of engineering drawings have been added under the new service.

Part I Current Docket Material Beginning with October 1979

A. Microfiche (48,000 sheets/year)	\$7,200
B. Aperture Cards (3,000 cards/year)	800
Annual Total	\$8,000

Part II Retrospective Docket Material (October 1978—September 1979)

A. Microfiche (40,000 sheets)	\$6,000
B. Aperture Cards (3,000 cards)	800
Total	\$6,800

Part III Three Mile Island No. 2

1. (Pre- and Post-Accident 1964—June 30, 1979)

A. Microfiche	
(5,500 sheets)	\$825
B. Aperture Cards	
(200 cards)	50
Total	\$875
2. Post accident July 1, 1979—October 31, 1979	
A. Microfiche (1700 sheets)	\$260

MICROFORMS

Today's personal professional library can be portable, thanks to microforms on which the printed page has been photographically reduced to thumbnail size, or smaller. You may comfortably carry fifty 300-page volumes on microfiche in your pocket. There is space for the equivalent of 98 pages, each a twenty-fourth the size of the original, on each 4x6 inch (105mm x 148mm) film sheet. One hundred and fifty sheets of film are 1 inch thick. **Microfilm** is on reels, about the size and shape of 16mm movie film. Each 100-foot reel contains about 2,200 printed pages, or 22 pages a foot. **Aperture cards** are standard tabulating cards into which microfilm images have been inserted. They are often key-punched for mechanical retrieval.

Microforms (film, fiche, or aperture cards) have other very practical qualities besides their uses for daily reference. One is "previewing" large and expensive volumes where there is uncertainty about the immediate usefulness or relevance of a particular work to a task at hand. Another is when only a chapter, one or two pages, or even a paragraph, of a volume is required. In both cases microforms are most satisfactory.

Portable fiche and film readers, some less than book size and very lightweight, are available for well under \$100. Some may be operated from self-contained rechargeable cells or from an automobile cigarette lighter. Readers which also print selected pages on paper are higher priced.

Practically all periodicals and vast varieties of historic and contemporary information are available on microforms.

Information Source for Equipment and Supplies

NATIONAL MICROGRAPHICS
ASSOCIATION

8728 Colesville Road
Silver Spring, Maryland 20910

Selected energy reports show wide range of NTIS energy collection

Thirty-four percent of the information added to the NTIS Bibliographic Data Base each year is energy related. It isn't practical to list enough titles in a catalog like this one to really depict the scope of the collection but the following selections are some of the more popular titles.

HIGH INTEREST ENERGY REPORTS

Biomass Energy Enhancement: A Report to the President's Council on Environmental Quality. Jul. 78, 140p
PB-296 624 NTIS Price: PC A07/MF A01

Health and Environmental Effects of Oil Shale Technology: A Workshop Summary and Panel Reports. May 79, 267p
PB-297 096 NTIS Price: PC A12/MF A01

Wastewater Treatment in Coal Conversion. Jun. 79, 287p
PB-297 587 NTIS Price: PC A13/MF A01

Health and Environmental Effects of Coal Gasification and Liquefaction Technologies: A Workshop Summary and Panel Reports. See also report PB-297 096. May 79, 374p
PB-297 618 NTIS Price: PC A16/MF A01

CFCC Development Program: Materials Evaluation and Specifications for Commercial Plant Hot Gas Clean-Up. (Task 4.2) Mar. 78, 21p
FE-2357-38 NTIS Price: PC A02/MF A01

Investigation Into the March 28, 1979 Three Mile Island Accident by Office of Inspection and Enforcement. (Investigative Report No. 50-320/79-10). Jul. 79, 788p
NUREG-0600 NTIS Price: PC A99/MF A01

National Energy Act of 1978: A Regional Assessment. Dec. 78, 23p
PB-296 479 NTIS Price: PC A02/MF A01

Solar Access Law. Protecting Access to Sunlight for Solar Energy Systems. Sponsored in part by Department of Energy, Washington, DC. May 79, 173p
PB-296 532 NTIS Price: PC A08/MF A01

Geothermal Resources and Technology in the United States. Feb. 79, 65p
PB-296 623 NTIS Price: MF A01

Health and Environmental Effects of Coal Gasification and Liquefaction Technologies: Background Material for a Workshop. Portions of this document are not fully legible. Jul. 78, 275p
PB-296 708 NTIS Price: PC A12/MF A01

Economics of Disposal of Lime/Limestone Scrubbing Wastes: Sludge/ Flyash Blending and Gypsum Systems. See also report dated Feb. 78, 8/PB-281 391. Feb. 79, 209p
PB-297 946 NTIS Price: PC A10/MF A01

Rehabilitation of Western Wildlife Habitat: A Review. Library of Congress catalog card no. 79-600047. Dec. 78, 252p
PB-298 049 NTIS Price: PC A12/MF A01

Quantified Occupant-Use Factors Affecting Energy Consumption in Residences. Jul. 79, 145p
PB-298 052 NTIS Price: PC A07/MF A01

Coal and the Environment Abstract Series. Bibliography on Mined-Land Reclamation. See also report dated May 78, PB-292 099. Sponsored in part by Office of Surface Mining Reclamation and Enforcement (DI), Washington, DC. Apr. 79, 383p
PB-298 191 NTIS Price: PC A17/MF A01

Statistical Analysis of Power Plant Capacity Factors. Feb. 79, 66p
NUREG/CR-0382 NTIS Price: PC A04/MF A01

Evaluation of Alternative Methods for the Disposal of Low-Level Radioactive Wastes. Jul. 79, 183p
NUREG/CR-0680 NTIS Price: PC A09/MF A01

Weatherization Materials Handbook. Jan. 79, 119p
PB-297 212 NTIS Price: PC A06/MF A01

Summer Attic and Whole-House Ventilation. Library of Congress catalog card no. 79-600086. Sponsored in part by Department of Energy. Washington, and Attic Ventilation Industry. Proceedings of a Workshop Held at Gaithersburg, MD on July 13, 1978. Jul. 79, 155p
PB-297 497 NTIS Price: PC A08/MF A01

Comparison of the Availability and Reliability of Equipment in the Electric Utility Industry. See also report dated Jan. 74, PB-253 367. May 79, 229p
PB-297 948 NTIS Price: PC A11/MF A01

Residential Energy Conservation. Volume I Library of Congress catalog card no. 79-600103. Jul. 79, 352p
PB-298 410 NTIS Price: PC A16/MF A01

Petroleum Pipeline Rates and Competition—Issues Long Neglected by Federal Regulators and in Need of Attention. 13 Jul. 79, 88p
PB-297 527 NTIS Price: PC A05/MF A01

Issues Facing the Future of Federal Coal Leasing. Jun. 79, 266p
PB-297 531 NTIS Price: PC A12/MF A01

State of the Art of Sensible Heat Storage for Solar Source Heat Pump Systems. Solar energy storage options workshop, San Antonio, TX, USA, 18 Mar. 1979. 1979, 9p
BNL-25909 NTIS Price: PC A02/MF A01

Battery Technology: An Assessment of the State of the Art. 27 Mar. 78, 66p
DOE/TIC-10146 NTIS Price: PC A04/MF A01

Decommissioning Commercial Nuclear Facilities: A Review and Analysis of Current Regulations. Aug. 79, 143p

NUREG/CR-0671

NTIS Price: PC A07/MF A01

Regulation of Federal Radioactive Waste Activities: Report to Congress on Extending the Nuclear Regulatory Commission's Licensing or Regulatory Authority to Federal Radioactive Waste Storage and Disposal Activities See also Summary report dated Sep. 79, NUREG-0527-SUM. Sep. 79, 306p

NUREG-0527

NTIS Price: PC A14/MF A01

The Economic and Energy Effects of Alternative Oil Import Policies 24 Jul. 79, 66p

PB-297 881

NTIS Price: PC A04/MF A01

Commercializing Solar Heating: A National Strategy Needed 20 Jul. 79, 84p

PB-297 882

NTIS Price: PC A05/MF A01

Health and Environmental Effects of Coal Technologies: Background Information on Processes and Pollutants

See also report dated May 79, PB-297 618. Aug. 79, 513p

PB-299 040

NTIS Price: PC A22/MF A01

Potential Production and Marketing of FGD Byproduct Sulfur and Sulfuric Acid in the U.S. (1983 Projection)

Apr. 79, 59p

PB-299 205

NTIS Price: PC A04/MF A01

Comparative Assessment of Residential Energy Supply Systems That Use Fuel Cells (Executive Summary) See

also report dated Apr. 79, PB-299 208. Apr. 79, 15p

PB-299 207

NTIS Price: PC A02/MF A01

Comparative Assessment of Residential Energy Supply Systems That Use Fuel Cells. (Technical Report) See

also report dated Apr. 79, PB-299 207. Apr. 79, 504p

PB-299 208

NTIS Price: PC A22/MF A01

Closed-Cycle Cooling Systems for Steam-Electric Power Plants: A State-of-the-Art Manual. Jan. 79, 382p

PB-299 290

NTIS Price: PC A17/MF A01

Proceedings: Symposium on Coal Cleaning to Achieve Energy and Environmental Goals Held at Hollywood, Florida on September 1978. Volume I. See also Volume 2, PB-299 384. Apr. 79, 647p

PB-299 383

NTIS Price: PC A99/MF A01

Proceedings: Symposium on Coal Cleaning to Achieve Energy and Environmental Goals Held at Hollywood, Florida on September 1978. Volume II. See also Volume 1, PB-299 383. Apr. 79, 592p

PB-299 384

NTIS Price: PC A25/MF A01

EPA Utility FGD (Flue Gas Desulfurization) Survey: December 1978-January 1979. See also report dated

Jan. 79, PB-290 497. May 79, 453p

PB-299 399

NTIS Price: PC A20/MF A001

Environmental Impact Assessment Guidelines for New Source Fossil Fueled Steam Electric Generating Stations. Jul. 79, 153p

PB-299 479

NTIS Price: PC A08/MF A01

Abandoned Coal-Mined Lands: Nature, Extent, and Cost of Reclamation. 1979, 34p

PB-299 535

NTIS Price: PC A03/MF A01

Technology, Safety and Costs of Decommissioning a Reference Pressurized Water Reactor Power Station.

See also Volume 1, PB-282 383, and Volume 2, PB-282 863. Aug. 79, 167p

NUREG/CR-0130-ADD

NTIS Price: PC A08/MF A01

SOLA-COOP: A Nonequilibrium, Drift-Flux Code for Two-Phase Flow in Networks. Aug. 79, 93p

NUREG/CR-0626

NTIS Price: PC A05/MF A01

Title List of Publicly Available Documents, Three Mile Island Unit 2, Docket 50-320 Cumulated to June 30, 1979. Supersedes NUREG-0568. Jul. 79, 226p

NUREG-0568-REV-1

NTIS Price: PC A11/MF A01

Handling and Storage of Spent Light Water Power Reactor Fuel. Volume 1. Executive Summary and Text. See also Volume 2, NUREG-0575-V-2. Aug. 79, 147p

NUREG-0575-V-1

NTIS Price: PC A11/MF A01

Handling and Storage of Spent Light Water Power Reactor Fuel. Volume 2. Appendices. See also Volume 1, NUREG-0575-V-1, and Volume 3, NUREG-0575-V-3. Aug. 79, 303p

NUREG-0575-V-2

NTIS Price: PC A14/MF A01

Handling and Storage of Spent Light Water Power Reactor Fuel. Volume 3. Comments on Draft Statement and Staff Responses. See also Volume 2, NUREG-0575-V-2. Aug. 79, 350p

NUREG-0575-V-3

NTIS Price: PC A15/MF A01

Report of the Siting Policy Task Force. Aug. 79, 140p

NUREG-0625

NTIS Price: PC A07/MF A01

Solar Energy. Volume II. The Potential for the Solar Heating and Cooling of Buildings. See also Volume 1, PB-297 862. 30 Jun. 76, 303p

PB-298 358

NTIS Price: PC A14/MF A01

Solar Energy for Agriculture: Review of Research. Aug. 79, 29p

PB-298 688

NTIS Price: PC A03/MF A01

Coal Project: Background Information (Planning and Management). 14 Jul. 76, 61p

PB-298 894

NTIS Price: PC A04/MF A01

Pilot Plant Gasification Test on Biomass Fuels. Jun. 79, 79p

PB-299 077

NTIS Price: PC A05/MF A01

Procedures for Independent Analyses of Electric Energy and Peak Loads by State Agencies. Volume 1. See also Volume 2, PB-299 303. Jul. 78, 345p

PB-299 302

NTIS Price: PC A15/MF A01

Procedures for Independent Analyses of Electric Energy and Peak Loads by State Agencies: Volume 2: Review of Existing Techniques. See also Volume 1, PB-299 302. Jul. 78, 250p

PB-299 303

NTIS Price: PC A11/MF A01

Semiconductor Measurement Technology: NBS/DOE Workshop, Stability of (Thin Film) Solar Cells and Materials. Sponsored in part by Department of Energy, Washington, DC. Advanced materials R and D Branch. Library of Congress catalog card no. 79-600098. Aug. 79, 184p

PB-299 964

NTIS Price: PC A09/MF A01

Wood Waste for Energy Study; Executive Summary. Sponsored in part by Washington State House of Representatives, Olympia. See also PB-300 285. 1 Jan. 79, 19p

PB-300 284

NTIS Price: PC A02/MF A01

Wood Waste for Energy Study; Final Literature Review. See also PB-298 693, and PB-300 284. Sponsored in part by Washington State House of Representatives, Olympia. 1 Jan. 79, 271p

PB-300 285

NTIS Price: PC A12/MF A01

Environmental Assessment Report: Solvent Refined Coal (SRC) Systems. Jun. 79, 848p

PB-300 383

NTIS Price: PC A99/MF A01

Issues Surrounding the Surface Mining Control and Reclamation Act. 21 Sep. 79, 56p

PB-300 549

NTIS Price: PC A04/MF A01

Recovery of By-Products from Animal Wastes: A Literature Review. Aug. 79, 62p

PB-300 623

NTIS Price: PC A04/MF A01

Fusion - A Possible Option for Solving Long-Term Energy Problems. 28 Sep. 79, 60p

PB-300 692

NTIS Price: PC A04/MF A01

Potential for Energy Recovery from Humid Air Streams. Jul. 79, 13p

PB-300 892

NTIS Price: PC A02/MF A01

Energy and U.S. Agriculture: Irrigation Pumping, 1974-77. Sep. 79, 45p

PB-300 911

NTIS Price: PC A03/MF A01

Assessment of the Technical and Economic Feasibility of Converting Wood Residues to Liquid and Gaseous Fuel Products Using State-of-the-Art and Advanced Coal Conversion Technology. Third Quarterly Report, December 1, 1978-February 28, 1979. May 79, 15p

COO-4862-3

NTIS Price: PC A02/MF A01

Shipping Containers for Nuclear Material: A Descriptive Bibliography. Sep. 79, 162p

NUREG/CR-0614

NTIS Price: PC A08/MF A01

Bibliography of Microfilmed Foreign Reports Distributed Under the NRC Reactor Safety Research Foreign Technical Exchange Program, 1978. Sep. 79, 145p

NUREG/CR-0915

NTIS Price: PC A07/MF A01

A Radioactive Waste Disposal Classification System. Volume 1. See also Volume 2, NUREG/CR-1005-V-2. Sep. 79, 65p

NUREG/CR-1005-V-1

NTIS Price: PC A04/MF A01

A Radioactive Waste Disposal Classification System. Volume 2. The Computer Program and Groundwater Migration Models. See also Volume 1, NUREG/CR-1005-V-1. Sep. 79, 61p

NUREG/CR-1005-V-2

NTIS Price: PC A04/MF A01

Energy Efficiency of Various Transportation Modes.

Library of Congress catalog card no. 79-13242. 1978, 50p
PB-299 994 NTIS Price: PC A03/MF A01

Marketability of Low-Head Hydropower. Sponsored in part by Department of Energy, Washington, DC. 29 May 79, 192p

PB-300 357 NTIS Price: PC A09/MF A01

Federal Demonstrations of Solar Heating and Cooling on Private Residences-Only Limited Success. 9 Oct. 79, 65p

PB-301 123 NTIS Price: PC A04/MF A01

Integrated Community Energy Systems: Engineering Analysis and Design Bibliography. May 79, 427p

ANL/CNSV-2 NTIS Price: PC A19/MF A01

A Review of Behavior of Plutonium in Soils and Other Geologic Materials. Sep. 79, 122p

NUREG/CR-1056 NTIS Price: PC A06/MF A01

Three Mile Island Telephone Survey: Preliminary Report on Procedures and Findings. Oct. 79, 90p

NUREG/CR-1093 NTIS Price: PC A05/MF A01

Directory of Certificates of Compliance for Radioactive Materials Packages. Volume I. Summary Report of NRC Approved Packages. (Revision 2) See also Volume PB-294 059. Oct. 79, 286p

NUREG-0383-V-1-REV-2 NTIS Price: PC A13/MF A01

Directory of Certificates of Compliance for Radioactive Materials Packages. Volume II. Certificates of Compliance. (Revision 2) See also Volume 2, Revision 1, PB-294 318. Oct. 79, 675p

NUREG-0383-V-2-REV-2 NTIS Price: PC A99/MF A01

TMI-2 (Three Mile Island) Lessons Learned Task Force Final Report. Oct. 79, 50p

NUREG-0585 NTIS Price: PC A03/MF A01

Environmental Considerations of Selected Energy-Conserving Manufacturing Process Options. Volume XVI. Sulfur Oxides Summary Report. See also Volume 18, PB80-106107. Aug. 79, 111p

PB80-106099 NTIS Price: PC A06/MF A01

Environmental Considerations of Selected Energy-Conserving Manufacturing Process Options. Volume XVIII. Particulates Summary Report. See also Volume 16, PB80-106099, Volume 19, PB80-106115, and PB-262 977. Aug. 79, 111p

PB80-106107 NTIS Price: PC A06/MF A01

Environmental Considerations of Selected Energy-Conserving Manufacturing Process Options. Volume XIX. Solid Residues Summary Report. See also Volume 18, PB80-106107. Aug. 79, 107p

PB80-106115 NTIS Price: PC A06/MF A01

Three Mile Island Number 2 Dockets (Pre- and Post-Accident, 1964-July 1979). 24X reduction microfiche. 1979 12 issues

PB80-900700 NTIS Price: Call (703) 487-4630

Issues Relating to the Proposed Alaska Highway Gas Pipeline Project. 26 Oct. 79, 153p

PB80-101454 NTIS Price: PC A08/MF A01

Key Crude Oil and Products Pipelines are Vulnerable to Disruptions. 27 Aug. 79, 81p

PB80-102593

NTIS Price: PC A05/MF A01

Low-Level Radioactive Waste Management. Volume II: Forecast of Low-Level Radwaste Management Requirements. See also Volume 1, PB80-105042 and Volume 3, PB80-105067. Nov. 78, 72p

PB80-105059

NTIS Price: PC A04/MF A01

Low-Level Radioactive Waste Management. Volume III: Feasibility of Volume Reduction Processes. See also Volume 2, PB80-105059 and Volume 4, PB80-105075. Nov. 78, 100p

PB80-105067

NTIS Price: PC A05/MF A01

Low-Level Radioactive Waste Management. Volume IV: Radioactive Waste Solidification and Handling Practices. See also Volume 3, PB80-105067 and Volume 5, PB80-105083. Aug. 79, 85p

PB80-105075

NTIS Price: PC A05/MF A01

Low-Level Radioactive Waste Management. Volume V: Policy Recommendations, Conclusions and Summary. See also Volume 4, PB80-105075. Aug. 79, 81p

PB80-105083

NTIS Price: PC A05/MF A01

Gasohol: A Technical Memorandum. Sep. 79, 89p

PB80-105885

NTIS Price: PC A05/MF A01

U.S. Non-Proliferation Strategy Reformulated. Sponsored in part by Department of Energy, Washington, DC., and National Security Council, Washington, DC. 29 Aug. 79, 64p

PB80-108335

NTIS Price: PC A04/MF A01

Demographic Statistics Pertaining to Nuclear Power Reactor Sites. Nov. 79, 429p

NUREG-0348

NTIS Price: PC A19/MF A01

Low-Level Radioactive Waste Management. Volume I: Current Power Reactor Low-Level Radwaste. See also Volume 2, PB80-105059. Mar. 78, 269p

PB80-105042

NTIS Price: PC A12/MF A01

Prospects for Cooperation and Trade of Energy Resources Between the United States and Canada.

8 Nov. 79, 41p

PB80-105489

NTIS Price: PC A03/MF A01

How to Burn Coal Efficiently and Economically, and Meet Air Pollution Requirements - The Fluidized-Bed Combustion Process. 9 Nov. 79, 56p

PB80-107501

NTIS Price: PC A04/MF A01

HUD Residential Solar Viability Program (RSVP/2): Computer Tape. Sep. 79, mag tape

PB80-111560

NTIS Price: CP T03

HUD Residential Solar Viability Program (RSVP/2): Users Manual. For system on magnetic tape, see PB80-111560. See also PB80-111586. Sponsored in part by Department of Energy, Washington, DC. Sep. 79, 184p

PB80-111578

NTIS Price: PC A09/MF A01

HUD Residential Solar Viability Program (RSVP/2): Programmers Manual. For system on magnetic tape, see PB80-111560. See also PB80-111578. Sponsored in part by Department of Energy, Washington, DC. Sep. 79, 365p
PB80-111586 NTIS Price: PC A16/MF A01

Improved Thermal Battery. Apr. 79, 134p
AD-A075 835 NTIS Price: PC A07/MF A01

State of the Art of Combined Gas/Steam Turbine Power Plants with Upstream Coal Pressure Gasification Plant by the STEAG-Lurgi System. In German. Conference on coal gasification and hydrogenation, Essen, F.R. Germany, 7 Dec. 1977. 1977 26p
AED-CONF-77-565-007 NTIS Price: PC A03/MF A01

Simulation of the Three Mile Island Transient in Semiscale. Jul. 79, 94p
EGG/SEMI-TR-010 NTIS Price: PC A05/MF A01

Control of NO/sub X/ Emission by Stack Gas Treatment. Final Report. Oct. 78, 22p
EPRI-FP-925 NTIS Price: PC A10/MF A01

A Systematic Assessment of the Safeguards Regulations. Volume I. Summary. See also Volume 2, NUREG-1102-V-2, Nov. 79, 37p
NUREG/CR-1102-V-1 NTIS Price: PC A03/MF A01

A Systematic Assessment of the Safeguards Regulations. Volume II. Report. See also Volume 1, NUREG/CR-1102-V-1, and Volume 3, NUREG/CR-1102-V-3. Nov. 79, 200p
NUREG/CR-1102-V-2 NTIS Price: PC A09/MF A01

A Systematic Assessment of the Safeguards Regulations. Volume III. Appendices. See also Volume 2, NUREG/CR-1102-V-2. Nov. 79, 195p
NUREG/CR-1102-V-3 NTIS Price: PC A09/MF A01

Safeguards Summary Event List (SSEL). See also NUREG-0525. Nov. 79, 150p
NUREG-0525-REV-1 NTIS Price: PC A07/MF A01

Report of Special Review Group, Office of Inspection and Enforcement on Lessons Learned from Three Mile Island. Dec. 79, 212p
NUREG-0616 NTIS Price: PC A10/MF A01

NRC Views and Analysis of the Recommendations of the President's Commission on the Accident at Three Mile Island. Nov. 79, 53p
NUREG-0632 NTIS Price: PC A04/MF A01

Assessment of Manufacturers' Capabilities to Meet Requirements for Control of Emissions of Sulfur Dioxide, Particulate Matter, and Nitrogen Oxides from Industrial Boilers. Oct. 79, 155p
PB80-112659 NTIS Price: PC A08/MF A01

Proceedings of Review Group Conference on Advanced Instrumentation for Reactor Safety Research Held at Washington, DC. on July 24-26, 1979. Nov. 79, 682p
NUREG/CP-0007 NTIS Price: PC A99/MF A01

SANDIA-ORIGEN User's Manual. Document contains 4 inserts 48X reduction microfiche. Dec. 79, 93p
NUREG/CR-0987 NTIS Price: PC E04/MF A01

Electrical Energy Development In the Pacific Southwest.

16 Oct. 79, 218p

PB80-101363

NTIS Price: PC A10/MF A01

European Refuse Fired Systems: Evaluation of Design Practices. Volume I. See also Volumes 2, 3, and 4, PB80-115322. 1979, 583p

PB80-115314

NTIS Price: PC A25/MF A01

European Refuse Fired Energy Systems: Evaluation of Design Practices. Volumes II, III, and IV. See also Volume 1, PB80-115314 and Volume 5, PB80-115330. 1979. 477p

PB80-115322

NTIS Price: PC A21/MF A01

Analytical Techniques for Stress Analysis of the Nuclear Steam-Supply System; a Bibliography. Jun. 79, 230p

NUREG/CR-0664

NTIS Price: PC A11/MF A01

Assessment of the Technical and Economic Feasibility of Converting Wood Residues to Liquid and Gaseous Fuel Products Using State-of-the-art and Advanced Coal Conversion Technology. Second Quarterly Report, No. DOE-8, GL-10290, September 1, 1978—November 30, 1978 Jan. 79, 11p

COO-4862-2

NTIS Price: PC A02/MF A01

Hydrogen Technology: An Overview 177. ACS national meeting, Honolulu, HI, USA, 1 Apr. 1979. 1979, 15p

BNL-25760

NTIS Price: PC A02/MFA01

Department of the Navy Energy Fact Book May 79, 520p

AD-A069 138

NTIS Price: PC A22/MF A01

Results of the Solar Cell Experiments Aboard the NTS-2 Satellite After 447 Days In Orbit 9 Mar. 79, 51p

AD-A069 082

NTIS Price: PC A04/MF A01

The United States Refining Policy In a Changing World Oil Environment 29 Jun. 79, 35p

PB-297 136

NTIS Price: PC A03/MF A01

State Solar Energy Legislation of 1977: A Review of Statutes Relating to Buildings See also report dated Sep. 77, PB-273 899. Sponsored in part by Department of Energy, Washington, DC. Office of Conservation and Solar Applications, and Department of Housing and Urban Development, Washington, DC. Div. of Energy, Building Technology and Standards. Feb. 79, 398p

PB-295 642

NTIS Price: PC A17/MF A01

TMI-2 Lessons Learned Task Force: Status Report and Short-Term Recommendations Jul. 79, 103p

NUREG-0578

NTIS Price: PC A06/MF A01

Title List of Publicly Available Documents, Three Mile Island Unit 2, Docket 50-320, Cumulated to May 21, 1979

See also report dated May 79, NUREG-0540-V-1-NO-4. May 79, 226p

NUREG-0568 Rev.

NTIS Price: PC A11/MF A01

State of the Art of High-Temperature, High-Pressure Gas Filtration and Desulfurization AICE meeting, Houston, TX, USA, 1 Apr. 1979. 1979, 24p

CONF-790405-10

NTIS Price: PC A02/MF A01

Alternate Engines - State of the Art Study Nov. 78, 85p
PB-293 940 NTIS Price: PC A05/MF A01

Thermal Storage Technologies for Solar Industrial Process Heat Applications 1979, 19p
N79-20498 NTIS Price: PC A02/MF A01

Standby Gasoline Rationing Plan. Regulatory Analysis
See also PB-292 605. Report on Standby Rationing Plan No. 1. Feb. 79, 233p
PB-292 607 NTIS Price: PC A11/MF A01

Standby Conservation Plan No. 3: Emergency Advertising Lighting Restrictions. Authorities, Need, Rationale, Operation See also PB-292 611. Feb. 79, 25p
PB-292 610 NTIS Price: PC A02/MF A01

Standby Conservation Plan No. 2: Emergency Building Temperature Restrictions. Authorities, Need, Rationale, Operation See also PB-292 608. Feb. 79, 31p
PB-292 609 NTIS Price: PC A03/MF A01

Standby Conservation Plan No. 2: Emergency Building Temperature Restrictions. Economic Analysis See also PB-292 609. Feb. 79, 41p
PB-292 608 NTIS Price: PC A03/MF A01

Proceedings of the Stationary Source Combustion Symposium (3rd). Volume IV. Fundamental Combustion Research and Environmental Assessment See also PB-274 029. Feb. 79, 237p
PB-292 542 NTIS Price: PC A11/MF A01

Proceedings of the Stationary Source Combustion Symposium (3rd). Volume III. Stationary Engine and Industrial Process Combustion Systems See also Volume 4, PB-292 542, and PB-257 146. Feb. 79, 180p
PB-292 541 NTIS Price: PC A09/MF A01

Proceedings of the Stationary Source Combustion Symposium (3rd). Volume II. Advanced Processes and Special Topics See also Volume 3, PB-292 541, and PB-256 321. Feb. 79, 315p
PB-292 540 NTIS Price: PC A14/MF A01

Proceedings of the Stationary Source Combustion Symposium (3rd). Volume I. Utility, Industrial, Commercial, and Residential Systems See also Volume 2, PB-292 540, and PB-256 320 Feb. 79, 254p
PB-292 539 NTIS Price: PC A12/MF A01

Design Guidelines for an Optimum Scrubber System
Jan. 79, 94p
PB-292 327 NTIS Price: PC A05/MF A01

Guidelines for Adjustment of Atmospheric Gas Burners for Residential and Commercial Space Heating and Water Heating Feb. 79, 35p
PB-290 777 NTIS Price: PC A03/MF A01

State of the Art of Devices for Reducing Energy Losses from Flue Stack Gases 15 Jan. 79, 81p
AD-A064 288 NTIS Price: PC A05/MF A01

Standby Conservation Plan No. 3: Emergency Advertising Lighting Restrictions. Economic Analysis See also PB-292 610. Feb. 79, 16p
PB-292 611 NTIS Price: PC A02/MF A01

Other NTIS products also relate to energy

Besides the specific energy information products and services covered in the preceding pages, the NTIS general product line is a principal resource that should be considered. Any of the following can be used singly or in combination to produce energy information over a wide range of categories.

Published Searches

These are the same high quality computer searches that NTIS sells daily for at least \$125 each when custom made.

The only difference is that *Published Searches* have been completed, printed, and published in response to either previous demand or to NTIS anticipation of unusually wide interest in particular subject areas. Therefore, *Published Searches* are scheduled, rather than performed on demand, and are less costly for NTIS to produce. There is no other difference. If you were to order an online NTISearch today it might include a few more research summaries completed since the last *Published Search*, but it would cost you at least \$125.

Most of these 2,200 or so specially priced *Published Searches* consist of as many as 100 different, thorough research summaries (abstracts) of advanced technology for business people, scientists, and specialists in urban, economic, and social affairs. Most of the reports summarized also are sold by NTIS.

Abstract Newsletter

The *Energy Abstract Newsletter* each week reports Federal research results covering energy sources and uses, supply and demand, power and heat generation, energy conversion and storage, energy transmission, fuel conversion processes, engines and fuels; as well as energy policies, regulations and studies.

Order: PB80-909700

\$80, annually

NTIS also publishes 25 other *Abstract Newsletters*. Check the form on page 32 for more information.

This specialized catalog is one of several designed for NTIS customers having similar interests. Other specialized catalogs are listed on page 28.

Full-text profiles in fiche

You can vastly expand your coverage of U.S. Government research and development with only a modest information budget. *Selected Research in Microfiche* (SRIM) limits your expense by sending you complete research reports (not just abstracts) in microfiche in *only* the subject areas you select.

Our analysts will help you choose from 390 categories and subcategories and 200,000 descriptive terms. Full text microfiche copies of the reports are sent to you biweekly, and instead of the regular single fiche report price of \$3.50 you pay only 85 cents for each SRIM microfiche title *automatically selected from your category*. A quarterly index of your category selections, in paper or film, is optional.

Each microfiche can contain the equivalent of 98 pages of text arranged in 4x6 inches (105mm x 148.75mm) and may be easily read with any microfiche viewer. You can easily carry the equivalent of fifty 300-page books in one pocket.

Here is an example of *Selected Research in Microfiche* in use.

Energy/Energy Use, Supply and Demand: 480 complete report texts were sent out over a 12-month period, costing the customer \$408. The same titles ordered individually in microfiche form would cost \$1680; and in paper copy, about \$3800.

Ask for a detailed description of SRIM categories in your area of interest, on page 28.

All NTIS abstracts in one volume

Summaries of U.S. Government research are published in one biweekly volume that includes five indexes. Coverage is comprehensive—about 70,000 new summaries annually, more than 7000 pages—and is indexed by subject, personal and corporate author, and Government contract and report/accession numbers.

The Government Reports Announcements & Index was designed for librarians and technical information specialists and for those used to working with technical information terms and sources.

GRA&I Annual subscription: \$275. Multiple subscriptions ordered at the same time for the same address are sold at a 15 percent discount.

Tech Notes includes energy

Tech Notes pulls together into a single convenient monthly package several two-page summaries of new applications for technology developed by different Federal agencies and their contractors.

To avoid overwhelming users with massive outpourings of new applications for Federal technology in all fields, *Tech Notes* is available in various subject categories. Currently these are:

Computers, Electrotechnology, Energy, Engineering, Life Sciences, Physical Sciences, Machinery, Materials, Manufacturing, Ordnance, and Testing and Instrumentation.

Prices: One Category, \$50; two categories, \$95; three categories, \$135; four categories, \$170; five categories, \$205; six categories, \$240; seven categories, \$275; eight categories, \$310; nine categories, \$345; ten categories, \$380; ALL CATEGORIES \$250.

NTIS Bibliographic Data Base

All of the research summaries announced by NTIS are included in the *NTIS Bibliographic Data Base* (on magnetic tape). Most are complete bibliographic citations and may be used to create a wide variety of information products.

Users of the *NTIS Bibliographic Data Base* are uniquely able to search a multiplicity of technical information input styles within the uniform NTIS format. There is no need for the user to acquire familiarity with different search strategies in order to search the several source tapes contributing to the NTIS file. Such "single" searching saves both computer and communication costs.

The magnetic tape containing the data file may be leased annually and files back to 1964 may be acquired. Current tapes are shipped to subscribers biweekly.

Use fees are charged quarterly and based on factors such as the number of citations displayed or searches performed and the possibility of third party use.

For further information on leasing the data file, please telephone (703) 487-4808.

Magnetic Tape Products

Data files and computer software sponsored by the Federal Government have been made available by NTIS since 1967. As a result NTIS has assembled a wide variety of software and data files, pertinent to business and scientific interests, that are available for sale or lease. The present collection contains more than 1200 data files and computer programs from more than 100 Federal agencies. These cover an array of subject fields: statistics, finance, education, demography and population, health statistics, building technology, energy sources, environmental pollution and control, and many others.

For more information about computer software and data files please telephone (703) 487-4808.

All of NTIS' products and services are summarized in General Catalog No. 7 (see page 28).

Key word title index gives NTIS report numbers and prices

This is a microfiche product to assist NTIS customers in identifying the sources of reports in the *NTIS Bibliographic Data File* and in verifying prices. The product is in three sections. The first section is a key-word-out-of-context title index in which superfluous words such as "an," "of," "the," etc., and high occurrence words such as "annual," "report," "volume," etc., have been omitted. Each individual entry under a common indexed word contains the full title, report date, number of pages, report number, price, availability, and accession/report number. This index can be used to locate the item number and price when only the title is known.

The second section is a listing by accession/report number.

The third section is an author index file with the author's name as the index term.

The initial product contains all 550,000 NTIS reports announced from July 1964 through December 1977.

The current *NTIS Title Index* is a quarterly cumulation of new publications. Approximately 17,500 new titles are added each quarter. The cumulations are merged quarterly on a two-year cycle. The *Index* is published within two weeks after the closing of the final Government Reports Announcement Index for the quarter.

Price when subscription is in force during both years of any 2-year cumulating cycle is \$400. Price when subscription is entered during second year of any 2-year cumulating cycle is \$300. Order: PB81-916000.

Save \$100 by ordering both the *Retrospective and Current Index*. Order PB81-916100.

THOSE INCONGRUOUS REPORTS

There are titles in the NTIS collection that probably shouldn't be there, or which may bear prices that seem excessive for that type of document. These may be brief promotional or explanatory booklets published by NTIS' sources to describe their programs and missions for the general public. Sometimes these publications are inadvertently included by the source agencies in the hundreds of new technical reports reaching NTIS daily. They are entered into the announcement process and priced as technical reports without their special character being noted. If you receive such a report and are not satisfied with it, please return it for a refund.

NTIS Domestic Price Codes

The prices below are for customers in the United States, Canada and Mexico. All other addressees please write for an appropriate price list.

Code	Price	Code	Price
A01	\$ 3.50	A15	\$ 24.50
A02	5.00	A16	26.00
A03	6.50	A17	27.50
A04	8.00	A18	29.00
A05	9.50	A19	30.50
A06	11.00	A20	32.00
A07	12.50	A21	33.50
A08	14.00	A22	35.00
A09	15.50	A23	36.50
A10	17.00	A24	38.00
A11	18.50	A25	39.50
A12	20.00	A26	41.00
A13	21.50	A99	*
A14	23.00		

*Please ask for a price quote.

E01	\$ 5.50	E13	\$ 30.50
E02	6.50	E14	33.50
E03	8.50	E15	36.50
E04	10.50	E16	39.50
E05	12.50	E17	42.50
E06	14.50	E18	45.50
E07	16.50	E19	50.50
E08	18.50	E20	60.50
E09	20.50	E99	*
E10	22.50	N01	30.00
E11	24.50	N02	50.00
E12	27.50		

*Ask for price quote

T01	\$ 110.00	T11	\$ 720.00
T02	125.00	T12	780.00
T03	210.00	T13	840.00
T04	300.00	T14	900.00
T05	360.00	T15	960.00
T06	420.00	T16	1,020.00
T07	480.00	T17	1,080.00
T08	540.00	T18	1,140.00
T09	600.00	T19	1,200.00
T10	660.00	T99	*

*Ask for price quote

How to order

The prices in this catalog cover sales in the United States, Canada and Mexico. Buyers for foreign destinations should read page 25.

RUSH HANDLING (replaces "Rush Order") is for customers who must have immediate delivery.

Rush Handling guarantees that a particular order will be filled within 24 hours of receipt. *Rush Handling* orders receive immediate validation, verification of availability, and individual hand processing through inventory control and the warehouse; priority printing if reproduction from film is required, and priority mailing.

Rush Handling orders for mailing rather than pickup are accepted only from customers having NTIS Deposit Accounts or American Express, Visa, or MasterCard Accounts.

Rush Handling orders may be placed only by telephone, telegram, Telex, Telecopier (numbers inside back cover) or customers in person; not by mail. Customers must use order numbers.

Rush Handling for delivery to customers by First Class Mail adds \$10 to the cost of each item or copy ordered.

Rush Handling for pickup in Springfield or D.C. adds \$6 to the cost of each item or copy ordered.

PREMIUM SERVICE is a day and night toll-free telephone ordering procedure ensuring order processing and mailing within four to nine days to NTIS Deposit Account or American Express, Visa, or MasterCard customers. The \$3.50 fee for each item is waived if the order is not mailed within the specified period. Customers must use order numbers. Titles alone cannot be accepted in this procedure.

All Deposit Account, American Express, Visa, and MasterCard customers receive *Premium Service* identification numbers with which they may place telephone orders at any time. *Premium Service* benefits are toll-free calls with 24-hour availability, no busy signals, simplified ordering techniques (details with the identification number), postage savings, and priority delivery.

Premium Service adds \$3.50 to the cost of each item ordered.

REGULAR SERVICE will continue to operate with improved processing and stocking methods, optional priority mail delivery (\$3 North America; \$4 outside) and optional pickup in Springfield or D.C. Current parcel post deliveries using the U.S. Postal Service are completed within 9 to 30 days.

ONLINE ORDERING: The commercial vendors of the NTIS Bibliographic Data Base are experimenting with the convenience of online ordering of NTIS documents for their customers. Currently, online ordering is offered by the Systems Development Corporation (SDC). It permits SDC customers to charge their NTIS Deposit Accounts for orders that are transmitted daily to NTIS. Inquiries should be addressed to SDC, 2500 Colorado Avenue, Santa Monica, California 90406.

TELEX: Ordering from NTIS may be speeded by the use of Telex. Customers may charge their Deposit Accounts, credit cards or ask for Ship & Bill Service. Ship & Bill Service costs \$5 extra for each order.

How to pay

The prices in this catalog cover sales in the United States, Canada and Mexico. Foreign Orders should be made through the foreign sales agencies for NTIS products, list available on request. Only if there is no foreign sales agency should orders be placed directly through NTIS.

The fastest service is provided to customers who charge against their NTIS Deposit Accounts or their American Express, Visa, or MasterCard accounts, because the processing of such orders is simplest for NTIS. New Deposit Accounts may be opened in the same manner.

Deposit Accounts may be opened in the same manner.

Otherwise, payment by check or money order must accompany each order.

As an added convenience to customers who have established credit, a Ship and Bill Service is provided, generally at a \$5 surcharge on each total order for documents, regardless of the number of documents ordered.

DISCOUNT ON MULTIPLE COPIES

When 20 or more paper copies of one title are ordered, NTIS automatically reduces the total price by 15 percent.

HOW TO OPEN A DEPOSIT ACCOUNT

Use the order form on page 27 and send at least \$25, or enough to cover your first order, to NTIS Deposit Account, 5285 Port Royal Road, Springfield, VA 22161. Thereafter, keep at least \$25 on deposit or enough to cover two month's charges. *Orders will not be processed for overdrawn accounts.* You may deposit any amount prior to ordering. Some active customers keep several thousand dollars in their accounts to ensure the fastest possible service for large orders.

When your account is opened, you will receive pre-addressed order forms to speed your shipments and simplify accounting and the recording of tax-deductible expenses.

RETAIL SALES AT TWO LOCATIONS

NTIS has two retail sales locations in the Washington area.

In the District of Columbia, the *NTIS Information Center and Bookstore* is in the Pennsylvania Building, Suite 620, 425 13th Street N.W. Telephone (202) 724-3382. Several hundred best selling titles are displayed for sale and for immediate delivery without the Rush Handling surcharge.

The *Springfield Operations Center* has a much more limited display of research reports, but any titles may be ordered for future delivery.

FOR MORE INFORMATION

Use the order form on page 28 to request the specific supplemental information referred to on the various pages of this catalog.

For information not covered by the order form, please direct your inquiry to Customer Services, NTIS, 5285 Port Royal Road, Springfield, VA 22161; or telephone (703) 487-4600 or (202) 724-3509.

Basic NTIS product is Federal research and technical information

As a cornerstone of the technological publishing structure in the United States, the National Technical Information Service (NTIS) is a key participant in the development of advanced information products and services for the achievement of U.S. productivity and innovational goals in the 1980s.

Three of the developmental areas in which progress is well underway are:

1. The greatly increased public availability of Federal computer software, programs, and data files.

2. The planned systematic acquisition of generally unpublished foreign technology, worldwide, of particular interest to U.S. industrialists.

3. The promotion of U.S. Government-owned patents for licensing by U.S. manufacturers, and the public availability of U.S. Patent and Trademark Office data files on magnetic tape.

NTIS, an agency of the U.S. Department of Commerce, is the central source for the public sale of U.S. government sponsored research, development, and engineering reports, as well as foreign technical reports and other analyses prepared by national and local government agencies, their contractors or grantees. It is the central source for federally generated machine processable data files and manages the Federal Software Center for intragovernment distribution. NTIS is one of the world's leading processors of specialty information.

The NTIS information collection exceeds 1.2 million titles, about 300,000 of which contain foreign technology or marketing information. All are permanently available for sale, either directly from the 80,000 titles in shelf stock or from the microfiche masters of titles less in demand. Seventy thousand new reports of completed research are added to the data base annually. In the same period NTIS supplies its customers with more than six million documents and microforms. It ships about 23,500 information products daily.

Full summaries of current U.S. and foreign research reports and other specialized information, in hundreds of subject categories, are published regularly by NTIS in a wide variety of weekly newsletters, a biweekly journal, an annual index, and in various subscription formats for other Federal agencies. The complete texts of the reports cited are sold in paper and microform.

Anyone seeking the latest technical reports or wanting to compile unique subject groups of abstracts may search the NTIS Bibliographic Data Base online, using the services of organizations that maintain the data base for public use through contractual relationships with NTIS. Or, the whole data base may be leased in machine-readable form directly from NTIS. The more timely

(Continued on page 31)

DEPOSIT ACCOUNT APPLICATION

☐ Here is my check to NTIS for \$ _____

Charge to my ☐ American Express ☐ VISA ☐ MasterCard.

Account No. _____

_____-_____-_____-
Expiration Date _____ Interbank no. _____

(if applicable)

Signature _____

(required to validate order)

FOR NTIS USE ONLY

DA No. _____ Code _____

Cert. No. _____

Check No. _____

Schedule No. _____

Certifier _____

Order Cards _____

Name _____

Company _____

Street _____

City, State, ZIP _____

Date _____ Signature _____

Telephone Number _____

National Technical Information Service U.S. DEPARTMENT OF COMMERCE

5285 Port Royal Road • Springfield, VA 22161
Telephone (703) 487-4600

Please send the following free information:

- ☐ Additional copy of this catalog
- ☐ Special Technology Groups NTIS-PR-209
- ☐ Abstract Newsletters NTIS-PR-205
- ☐ List of Published Searches NTIS-PR-186
- ☐ A Reference Guide to the NTIS Bibliographic Data Base NTIS-PR-253
- ☐ I would like to talk with an analyst about SRIM
- ☐ SRIM Categories NTIS-PR-270
- ☐ Tech Notes NTIS-PR-365
- ☐ General Information Services Catalog NTIS-PR-154
- ☐ Information for Innovators NTIS-PR-598
- ☐ Special Credit Account Application for Local Governments and State Universities NTIS-PR-220
- ☐ Domestic Price Codes NTIS-PR-360-3 (North America)
- ☐ Foreign Price Codes NTIS-PR-360-4

Name _____

Address _____

City, State, ZIP _____

Phone _____

- ☐ NTIS Title Index NTIS-PR-567
- ☐ Federal Information Processing Standards (FIPS) NTIS-PR-357
- ☐ Foreign Broadcast Information Service/Joint Publications Research Service (FBIS/JPRS) NTIS-PR-376
- ☐ Computer Software Directories NTIS-PR-572
- ☐ Cancergram, Oncology Overviews NTIS-PR-412
- ☐ Federal Energy Technology Catalog NTIS-PR-593
- ☐ Foreign Technology and Foreign Marketing Information Catalog NTIS-PR-594
- ☐ Data Base Services and Federal Technology in Machine-readable Formats Catalog NTIS-PR-595
- ☐ Federal Engineering Technology Catalog NTIS-PR-596
- ☐ Special Foreign Currency Science Information Program (SFCSI) NTIS-PR-620
- ☐ CIA Reports/Subscriptions NTIS-PR-630

Check Here
For Free
Information
In
Your Area of Interest

**Order Here
Use This Coupon
To Take Advantage of the
NTIS Products Most
Valuable to you**

Order priced products on this section of coupon:

NTIS--PR-593

(required to validate order)

If you find that the reports and microfiche you receive from NTIS are occasionally not what you expected, NTIS will refund their purchase price if the items are returned with your refund request and copies of your original order.

29

DEPOSIT ACCOUNT APPLICATION

☐ Here is my check to NTIS for \$ _____ Expiration Date _____ Interbank no. _____
(if applicable)
Charge to my ☐ American Express ☐ VISA ☐ MasterCard.
Signature _____
Account No. _____ (required to validate order)

FOR NTIS USE ONLY

DA No. _____ Code _____
Cert. No. _____
Check No. _____
Schedule No. _____
Certifier _____
Order Cards _____

Name _____

Company _____

Street _____

City, State, ZIP _____

Date _____ Signature _____

Telephone Number _____

(Continued from page 26)

abstracts are continually grouped by NTIS into paper-bound "Published Searches," covering some 2200 topical subject areas.

Customers with well defined continuing interests subscribe to a standing order microfiche service (SRIM) which enables them automatically to receive the full texts of only those documents relating to their individual requirements. A similar service provides the automatic distribution of paperbound reports.

NTIS sells its technical information products and services under the provisions of Title 15 of the U.S. Code (1151-7). The law establishes a clearinghouse for scientific, technical, and engineering information and directs NTIS to be self-supporting.

NTIS, therefore, is a unique Government agency sustained only by its customers. It operates very much as a business, but in the public service. All the costs of NTIS products and services, including rent, telephone, salaries, marketing and postage, and all other usual costs of doing business, are paid from sales income; not from tax-supported congressional appropriations.

Solar heating guide for homes still breaking NTIS sales records

More than 40,000 NTIS customers have ordered *An Inexpensive Economical Solar Heating System for Homes*, a 58-page book produced by the National Aeronautics and Space Administration.

Complete with diagrams this how-to-do-it guide gives complete instructions for building a \$2,000 solar heating system to supplement forced warm air heating. All components should be available from local sources. (N76-27671). Price: Code A04.

At least 26 million referrals annually are made to specific titles in the NTIS system, three each second of the NTIS workday. And, every second of the NTIS workday, a buyer receives a specially requested information item. About 3,600 new buyers are added to the NTIS customer list monthly and 10,000 customers make repeat purchases, resulting in 23,500 items of information being shipped daily. Every two minutes during the NTIS workday one new technical report enters the NTIS system.

Our goal is to give you timely information when you want it. Should you have a problem or a request which requires fast action, telephone us at the Springfield Operations Center between 7:45 a.m. and 4:15 p.m., (703) 487-4650, Monday thru Friday, or at the Washington Information Center & Bookstore between 9 a.m. and 4:30 p.m., (202) 724-3509. Telex and Telecopier service operates 24 hours, seven days a week.

To Check on Orders

(703) 487-4660

Subscriptions

(703) 487-4630

Computer Products

(703) 487-4763

New Orders for Documents & Reports

(703) 487-4650

NTISearches

(703) 487-4642

SRIM

(703) 487-4640

Pickup Orders

**Washington Information Center & Bookstore
between 9 a.m. and 4:30 p.m.**

(202) 724-3382

after 4:30 p.m.

(202) 724-3383

At Springfield Operations Center

(703) 487-4650

Accounting

(703) 487-4770

Rush Handling

(703) 487-4700

or Toll Free (800) 336-4700

Other Information

(703) 487-4600

Telecopier or 3M Facsimile Service

(703) 321-8547

Telex

89-9405

64617 (International)

A STATEMENT OF PURPOSE

NTIS is an information service organization stemming from a congressionally created predecessor. It channels information about technological innovations and other specialized information to business, educators, government, and the public. Its products and services are intended to increase the efficiency and effectiveness of U.S. research and development, to support U.S. foreign policy goals by assisting the social and economic development of other nations, and to increase the availability of foreign technical information in the United States. NTIS undertakes and develops innovative information products and programs appropriate for Government, but which have the potential to become self-supporting.

NO CHARGE IF NOT WHAT YOU EXPECTED

If you find that the reports and microfiche you receive from NTIS are occasionally not what you expected, NTIS will refund their purchase price if the items are returned with your refund request and copies of your original order.



Prices Current
January 1981
Subject to change

U.S. Department of Commerce
Malcolm Baldrige
Secretary

National Technical Information Service

Melvin S. Day
Director

Joseph F. Caponio
Deputy Director



A0000072001424

In answer to
your inquiry
see page(s)

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

5285 Port Royal Road
Springfield, Virginia 22161

OFFICIAL BUSINESS
Penalty for Private Use, \$300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-211

Third Class Blk. Rt.

